

METHOD AND APPARATUS OF RADIOGRAPHIC IMAGING WITH AN ENERGY BEAM TAILORED FOR A SUBJECT TO BE SCANNED

Abstract

A method and apparatus for tailoring the profile of an x-ray beam for radiographic imaging for a specific subject is disclosed. The invention includes a filter assembly having a pair of filters, each of which may be dynamically controlled by a motor assembly during data acquisition. The filters are positionable in the x-ray beam so as to shape the intensity profile of the x-ray beam. In one exemplary embodiment, the filters are dynamically positioned during CT data acquisition based on the shape of the subject. A method of determining the shape of the subject prior to CT data acquisition is also disclosed.